

# Benefits and Barriers to Certification of Community-Based Forest Operations in Cameroon: An Exploratory Assessment

Dieudonne Alemagi · Reem Hajjar · Serena David · Robert A. Kozak

Accepted: 23 November 2011 / Published online: 1 December 2011  
© Steve Harrison, John Herbohn 2011

**Abstract** Community-based Forest Operations (CFOs) have played a notable role in promoting sustainability within Cameroon's indigenous forest-dependent communities, but they are fraught with a range of socio-economic and ecological hurdles. As a means of achieving more sustainable forest practices, one possible solution would be for CFOs to adopt forest certification, though various barriers would have to be overcome. Using a number of examples at the regional level, this paper examines the potential benefits and barriers to community forest certification in Cameroon. Specifically, the paper identifies these barriers as legislative and political, economic, and informational in nature. While adoption of forest certification hinges upon what initiatives are employed by CFOs, it is argued that there is also a need for the government of Cameroon to play a leadership role in removing hurdles and promoting the uptake of certification.

**Keywords** Community forestry · Market-based mechanism · Policy barriers · Indigenous forest-dependent communities · Central Africa

---

D. Alemagi (✉)  
Faculty of Forestry, The University of British Columbia, 4612-2424 Main Mall,  
Vancouver, BC V6T 1Z4, Canada  
e-mail: dalemagi@yahoo.co.uk

R. Hajjar · S. David  
Faculty of Forestry, The University of British Columbia, 2900-2424 Main Mall,  
Vancouver, BC V6T 1Z4, Canada  
e-mail: reem.hajjar@gmail.com

S. David  
e-mail: 060135@agroparistech.fr

R. A. Kozak  
Faculty of Forestry, The University of British Columbia, 4040-2424 Main Mall,  
Vancouver, BC V6T 1Z4, Canada  
e-mail: rob.kozak@ubc.ca

## Introduction

Since the 1990s, community forestry has been promoted in programs aimed at assisting forest-dependent communities to improve their livelihoods and reclaim property rights, while concurrently conserving forests (Amaral and Neto 2005; Bray et al. 2005; Humphries and Kainer 2006). Indeed, advocates of community forestry argue that this model is capable of reconciling the goals of equality, securing property rights, economic development, and environmental sustainability in forest-dependent communities (Gauld 2000; Alemagi 2010).

Since the enactment of community forest legislation in 1994, Cameroon's Ministry of Forests and Fauna (MINFOF) has set aside more than 621,245 ha to be managed as community-based forest operations (CFOs) under 147 separate license agreements (Kongape and Etoa-Akoa 2011). Although they only cover approximately 1.9% of Cameroon's forests, community forests have been shown to play an important role in fostering the sustainability of communities within which they exist (Mbile et al. 2008; Ndjebet 2008). For example, the creation of indigenous CFOs in the Littoral Region has been effective in reducing illegal logging (Ndjebet 2008; Alemagi 2010). In the East Region, proceeds from the exploitation of the Ngola-Achip community forest were used to provide basic social infrastructure to its communities (Angu 2007).

CFOs in Cameroon have faced a range of socio-economic and ecological hurdles. Even in forest-dependent communities with community forest licenses, levels of unemployment and abject poverty remain high and regulations that govern traditional user rights within the context of community forestry are often not properly enforced (Alemagi 2010). For instance Alemagi (2010), contended that forest guards are known to abuse their powers by confiscating bush meat legally obtained by local residents from their community forests in the East Region of Cameroon. Additionally, the voices of indigenous Aboriginal communities in this region have long gone unheard with respect to forestry practices and legislation (von Schkopp 1913), even though some have recently been granted official rights and powers to manage forest ecosystems within the context of community forestry agreements (Mveng 1984; Wilkie 1988; Oyono 2005).

From an operational point of view, the processing and extraction of timber in most CFOs in Cameroon is crude and rudimentary (Alemagi 2010) because many CFOs lack the capital to mechanize their operations (Etoungou 2003). As an alternative, head-loading of sawn timber, a method for timber transportation that is known to be extremely deleterious to human health, is an endemic practice (Mbile and Ndzomo-Abanda 2006; Mbile et al. 2008). At the other extreme, 44% of the CFOs in the South and East Regions have contracted their forests out to large-scale logging companies (Abèle et al. 2004; Oyono 2005). This generally results in environmental degradation, an unequal power distribution between corporations and communities, and increasing vulnerability of forest-dependent indigenous communities to fluctuating economic cycles (Gauld 2000; Hayter 2003; Hayter et al. 2003; McCarthy 2006). Given that community forest operations are allowed only a maximum statutory limit of only 5,000 ha, contracting out their forests to large-scale interests can have devastating and unsustainable consequences in a very short time (Oyono 2004).

There are several possible ways to promote sustainable forest management among Cameroon's CFOs, including reforms to national forest-related policies and regulations, the use of customary laws and practices, international mechanisms such as FLEGT (Forest Law Enforcement, Governance and Trade), and the use of criteria and indicators for sustainable forest management (commonly referred to as SFM). An additional way for CFOs in Cameroon to achieve a range of ecological and socio-economic goals would be to adopt forest certification as an incentive to promote more sustainable forest practices. Forest certification, a market-based voluntary process by which a third-party (certifier or certification body) ensures that the management of a defined forested area is in compliance with standards and criteria of responsible forestry practices (Elliot and Donovan 1996; Pinchot Institution for Conservation 2006; Araujo 2008; FSC 2011), has been identified as an important tool for promoting sustainable forest management (Humphries and Kainer 2006). The certification of community forests worldwide has seen support from governments, international financial organizations, national and international environmental (NGOs), and the timber industry (MMA and Gov. of Acre 1999; WWF 2002; Carrera et al. 2006; Humphries and Kainer 2006), as a means of addressing many of the ecological and socio-economic concerns of forest-dependent communities world-wide (Thornber and Markopoulos 2000; Molnar 2004; Humphries and Kainer 2006). Indeed, by 2009, 117 CFOs worldwide were certified under the Forest Stewardship Council (FSC) certification scheme, comprising an estimated area of 5.6 M ha (FSC 2009).

While certainly not the only way to achieve sustainable forest management, the primary driver for the high degree of support for certification programs seems to be in their ability to provide financial and other incentives for sustainability. For example, in a study of certified CFOs in the Brazilian Amazon, Humphries and Kainer (2006) found that certification brought about many positive socio-economic, technical and environmental benefits. Socio-economic benefits included improved market access, higher prices for forest products, greater confidence in contracts, product uniqueness, a higher degree of recognition of the community and its work, less complex marketing programs, increased usage of personal safety equipment, organizational improvements (of enterprises), increased community credibility with state authorities, and improved government support. Several technical benefits were also cited, including improved management practices, easier management plan approval from the relevant local forestry authority, and improvement in the control of equipment used in forest management operations. More efficient management of forest waste and increased efforts to reduce forest degradation were identified as environmental benefits. In Indonesia, where unsustainable forest management practices are endemic, certification of CFOs created new standards for forest management and raised the management standards of CFOs (Molnar 2003). Certification of CFOs in Bolivia and Guatemala provided standards for sustainable management of resources, a reduction in illicit and poor management practices in the private sector (those competing with CFOs for market share), and more focused financial assistance from national and foreign donors (Molnar 2004). In other cases, certification has provided CFOs with easier access to markets, as well as increased market shares for their forest products (Thornber and Markopoulos 2000; De Pourcq

et al. 2009). Finally, Molnar (2004) reported that certified CFOs in South Africa and Brazil offered a legitimate vehicle to advance a national dialogue on issues of forest tenure, equality among workers, and public participation in the management and allocation of natural resources.

Despite all of these advantages, the uptake of forest certification remains low in Africa (Molnar 2003) and likely non-existent among CFOs in Cameroon.<sup>1</sup> The objective of this paper is to examine the potential opportunities for certification to address some of the above-mentioned socio-economic and ecological problems seen in Cameroon's CFOs. The feasibility of promoting certification as a means of advancing sustainable forestry practices is assessed by identifying potential barriers to forest certification. A series of policy recommendations for overcoming some of these challenges are outlined for relevant stakeholders, including the government and civil society.

## Research Method

A two-pronged research approach was followed for this exploratory study. First, a comprehensive review of secondary sources, including relevant governmental legislation and reports, working papers from government and civil society, and peer-reviewed literature, was conducted. The themes presented in this paper were developed through a synthetic review and evaluation of these data sources as they relate to community forestry, both in Cameroon and other developing countries.

These secondary data were supplemented with survey data from interviews with 16 heads of community-based non-governmental organizations (NGOs) that assist forest-dependent communities in managing CFOs in the East, Littoral, and Southwest Regions of Cameroon. These NGOs were working with 37 CFOs, representing 25% of all community forest enterprises in the country. They do not necessarily have any interest in promoting certification because final auditing and certification of the forest is done by a third party certifier. Thus, their views represent a neutral assessment of the possibilities of certification of CFOs in Cameroon. Each interviewee that was approached consented to participate in the study. Interviews were conducted between March 2009 and December 2010 during field visits, workshops, and also by telephone. The interviews were semi-structured, meaning that questions were prepared in advance to serve as 'signposts', conveying the intended direction of the conversation, but not constraining the interview from going in other directions as topics and issues arose (following Ammenberg 2003). The main questions that were posed to the interviewees included:

- What is the name of your organization and what position do you hold?
- Are any of the community forests (CFO) that you work with certified under a forest certification scheme? If so, which one(s)?<sup>2</sup>

<sup>1</sup> In informal interviews in 2008, representatives of two civil society organizations working with CFOs in Cameroon indicated that to the best of their knowledge, no CFO in Cameroon was certified.

<sup>2</sup> This question was used to update information received previously indicating there were no CFOs in Cameroon.

- If the community forests (CFO) that you work with are certified, what principal problems have these certified community forests encountered?
- If the community forests (CFO) that you work with are not certified, what are the principal factors that prevent them from being certified?
- In your view, what are the opportunities associated with community forest certification?

Interviews lasted approximately 30 min, and were conducted in English or French at the home or office of each interviewee. To minimize the occurrence of biased responses, interviewers avoided leading the interviewees during the interviews (following Kvale 1996; Ammenberg 2003) and reacted in a neutral manner by not signalling preferred answers (Ammenberg 2003). The transcribed interviews were analyzed by selecting relevant passages or quotes from the transcripts. After an initial open-coding process (as described by Creswell 1998), these were then coded according to emergent themes identified as potential benefits associated with and principal barriers to community forest certification in Cameroon. Notably, although several themes emerged from the review and analysis of the literature, this paper focuses on three themes related to potential benefits of certification, namely social, economic and environmental benefits. Similarly, three hurdles were most recurrent and, thus, deemed the most critical in preventing the uptake of community forest certification in Cameroon: legislative and political; economic; and informational.

## Results and Discussion

This study confirmed that no CFOs in the regions studied are certified. The results of this study are presented in two sections: (1) potential benefits associated with community forest (CFO) certification in Cameroon; and (2) barriers to community forest (CFO) certification in Cameroon.

### Potential Benefits Associated with Community Forest Certification in Cameroon

The interviewed NGO representatives were in general agreement that there is a need for CFOs to adopt certification in light of the numerous opportunities attributed to this forest management tool. Interviewees listed several perceived benefits associated with certification, which are summarized below according to the three themes derived in the review and analysis of literature, and are supplemented with quotes provided by the interviewees.

#### *Economic Benefits*

Access to international markets, joint ventures with foreign companies, price security for forest products, the potential for increased profits, and an increased ability to invest in community development plans and programs were all identified as potential economic benefits ascribed to certification of CFOs. A possible

explanation for this result may be that NGOs and development organizations in Cameroon perceive certification to be a vital tool for profitability of CFOs. As one civil society leader explained: 'I have read [from some NGOs] that community forests are doing economically well in other countries [...].' This view has been supported by a few authors (e.g. Thorner and Markopoulos 2000; De Pourcq et al. 2009; Humphries and Kainer 2006) who contended that the certification of CFOs leads to improved market shares and the ability to obtain price premiums for forest products.

### *Social Benefits*

International recognition and credibility, improved education and awareness about forestry and the certification process, and participation in training were cited as examples of potential social opportunities of forest certification. These observations are not particularly surprising and can be attributed to the importance ascribed to community forest certification in Cameroon by local and international NGOs, as well as their efforts in educating CFOs about the certification process. A case in point is an international forum that was organised by Cameroon Ecology (a local NGO) and financed by the Interchurch Organization for Development and Cooperation (a Dutch international NGO), which took place in 2010 in the city of Edea (located in the Littoral Region of Cameroon) to inform and sensitize CFOs on sustainable forest management and group certification schemes for CFOs. Interviewees also mentioned that forest certification can help to reduce internal conflicts within CFOs. A likely explanation is that the resolution of internal conflicts is one of the key requirements of certification and, therefore, certification should play a useful role in identifying and managing such conflicts (as observed by Markopoulos 2003; Carrera et al. 2006; De Pourcq et al. 2009). Finally, improvements in the safety and health of CFO employees emerged as potential benefit of certification. For example, certification could play a complementary role<sup>3</sup> in reducing the head-loading of sawn timber in community forest operations, an activity done mostly by women and children which is known to be harmful to human health (Mbile et al. 2008). This result is in line with previous research that points to improved health and safety practices and conditions of CFO employees as a result of certification (Molnar 2003; De Pourcq et al. 2009).

### *Environmental Benefits*

Improvements in the conservation of high value commercial tree species and simplification surrounding the tracking of illegally harvested logs from CFOs were brought up by interviewees as potential environmental benefits of forest certification. This is consistent with other studies (e.g. by Nussbaum and Simula 2005; Quevedo 2006; De Pourcq et al. 2009), and in line with FSC principles which require biodiversity conservation and the control of illegal logging. In fact, respondents see certification as an effective solution to these two issues, both of

<sup>3</sup> Regulations can also be enacted to prohibit this human right violation.

which are widespread in the forests of Cameroon. Ecological degradation is also common within Cameroon's rainforests (Cerutti et al. 2008). Nguemdjom (2006) noted that annual forest loss (caused by forest degradation and deforestation) in Cameroon is estimated to be 1% while others have estimated that the rate of deforestation of Cameroon's forests ranges from 80,000 to 200,000 ha per year (Ndoye and Kaimowitz 2000; Gbetnkom 2005). Similarly, illegal logging remains an endemic problem in Cameroon, including within CFOs (Mbile et al. 2008; Alemagi and Kozak 2010).

### Barriers to Community Forest Certification in Cameroon

Despite the many positive perceptions of certification that emerged from the interviews, certification has yet to make any headway amongst CFOs in Cameroon. Community forests face enormous barriers that impede adoption and implementation of certification. In fact, in most instances, CFOs in Cameroon perceive these hurdles to be insurmountable and are, therefore, discouraged from adopting certification. These hurdles are summarized below according to three major themes identified in the review and analysis of secondary data sources, and are complemented with quotes from the interview transcripts. They have been identified as legislative and political, economic, and informational barriers.

#### *Legislative and Political Barriers*

CFOs in Cameroon are subject to a diverse set of socio-economic and ecological regulations, as summarized in Table 1. The 1994 forestry law (Law No. 94/01 of 20th January 1994) was formulated and published by the government in 1994 and, in the following year, a decree (Decree No. 95-531-PM of 23rd August 1995) was passed to facilitate its implementation (Alemagi and Kozak 2010). The 1994 forestry law is cited as the first attempt to integrate community forestry into Cameroon's forestry regulatory framework (Oyono 2004). Other significant statutes include the Environmental Impact Assessment Decree (Decree No. 2005/0577/PM), which contains provisions for public participation as a fundamental prerequisite for establishing any community forest in Cameroon, Order No. 0520/MINATP/MINFI/MINFOF of 3 June 2010 which stipulates how proceeds from the exploitation of a community forest should be used, and Decision No. 0098/D/MINFOF/SG/DF/SDFC of February 2009 on the adoption of a revised Manual of the Procedures for the Attribution and Norms for the Management of Community Forests.

Regulations and policies in Cameroon mandate that community forests are managed with a set of socio-economic and ecological conditions in order to advance sustainability. For example, Decision No. 0098/D/MINFOF/SG/DF/SDFC of February 2009 requires CFOs to develop and implement a management plan. However, the complexity of the regulations involved in formulating these plans presents a major hurdle for CFOs, which cannot comply without the assistance of costly technical service providers. It is partly this challenge that prevents CFOs from adopting forest certification. An interviewee in the Littoral Region of the country provided a more precise account of the problem:

**Table 1** Key legislation governing CFOs in Cameroon

Law	Year enacted	Description
Law No. 94/01	1994	The main regulatory framework governing forestry in Cameroon. It contain provisions for community forestry
Decree No. 95-531-PM	1995	Provides a framework for implementation of the main forestry regulation
Decree No. 2005/0577/PM	2005	Mandates public participation as a fundamental requirement for community forest decision-making
Decision No. 0098/D/ MINFOF/SG/DF/SDFC	2009	Provides a framework which contains procedures for the attribution and norms for managing community forests
Order No. 0520/MINATP/ MINFI/MINFOF	2010	Stipulates how proceeds from the exploitation of a community forest should be used

Forest certification has so many potentials and it will certainly be beneficial for community forest enterprises in this Region to have these certification systems. However, the way I see it is that community forest operations will have problems implementing these systems because of the current forestry laws of the country that are complex [...]. We were just talking about the recently revised manual for community forestry that still requires community forest to submit a management plan [...]. If preparing and submitting this plan is still a headache for communities, then this certification is out of question [...].

While programs and instruments to ensure compliance with community forest regulation in Cameroon do exist, enforcement is weak. The main weaknesses of Cameroon's legislation in relation to community forestry have been identified as: the absence of comprehensive legal frameworks and uneven enforcement; inefficient inter-ministerial cooperation between the departments responsible for regulating CFOs; the absence of legislative provisions with regards to the 'polluter pays' principle for waste assessment within community forests; and over-centralization of the decision-making authority for approval of community forest licenses (Alemagi 2010).

Poorly developed and weak regulations with limited governmental pressures give CFOs in Cameroon little incentive to adopt mandatory sustainable forest management practices, let alone forest certification. These weak regulations are perceived as a major challenge for CFOs, as well as international organizations and civil society seeking to encourage and improve uptake of forest certification within these CFOs. Largely because of the weak legislative framework and inadequate enforcement, corruption is endemic in Cameroon. Transparency International has regularly rated Cameroon as one of those countries with endemic corrupt practices in the world and, with a corruption perception index (CPI) of 2.3 out of 10 (Transparency International 2008), illegal activities are deeply rooted in the country (Ameriei 2005; Transparency International 2008). Specifically, embezzlement and mismanagement of revenues generated from the sale of forests products from CFOs by members of the management committees is common, with documented examples



from the East Region of the country. According to Oyono (2005): ‘In the Kongo village, of the US \$29,730 generated by CFOs from December 2001 to December 2003, only US \$9,580 was spent on economic or social purposes’, while the rest was stolen by management committees. In another example, as a result of embezzlement, only 12% of the proceeds (US \$7,920) obtained from CFOs was used for societal development in the village of Mboké located in the South Region of Cameroon (Oyono 2005). Corruption, weak legislation, weak governance and weak law enforcement lead to unsustainable forest management and, thus, are not at all conducive to certification (Becker and Laaksonen-Craig 2006).

Community forest certification is not only contingent upon the time and financial resources invested in the process, but also on the degree to which it is encouraged by the government (Becker and Laaksonen-Craig 2006). Cases in point are Mexico and Guatemala, where uptake of community forest certification is high as a result of continued political and economic support from the government, following the lead of international NGOs and donors which subsidized the initial certification process. By 2004, 26 and 14 CFOs were certified in Mexico and Guatemala respectively (Gambetta et al. 2006; Fonseca 2006). In Cameroon, the government’s indifference towards such a forest management tool has not helped CFO certification. The following excerpt from an interviewee in the Littoral Region of the country highlights this point:

They [government] are claiming commitment to sustainable forest management but have not done anything financial, political, or morally that I know in this Region to show support for certification of community forests [...].

Secure land tenure is also a principal requirement of FSC certification. This can be a considerable obstacle to the adoption of certification in Cameroon, as indigenous CFOs do not have permanent land ownership within community forests because their customary land rights within these forests are not constitutionally or legally protected (Nguiffo et al. 2009). Molnar (2004) noted that forest certification should not be used to legitimize flawed forest policies in countries that have not addressed land tenure issues, a recommendation that has been emphasized by FSC.

### *Economic Barriers*

Many communities and regional governments with community forest licenses in Cameroon have limited knowledge of certification and do not have the funds required for its promotion. In the absence of financial assistance, it can be argued that most forest communities owning such licenses will not be able to adopt certification schemes. Direct costs of certification (particularly those associated with reports, audits and compliance) are relatively high and constitute a major obstacle for CFOs in developing countries attempting to adopt certification (Bass et al. 2001; Molnar 2003; Acharya 2007). Further, there are few certifiers in developing countries (Thorner et al. 1999), including Cameroon, which serves to encourage monopolistic services, reduced competition, and ultimately higher costs. As one interviewee in the Southwest Region of the country commented, the direct and indirect costs associated with procuring a forest management certification system

are likely to be about \$US 0.29/ha. In fact, Nkoulou and Fomete (2009) estimated that the total cost of certifying a group of 32 CFOs in Cameroon (with an estimated total surface area of 90,865 ha) could be as much as \$US 251 M when costs for all education and training programs, management improvement and implementation, and auditing are included. Without financial assistance, CFOs in Cameroon would have difficulty becoming certified or even adequately complying with the requisite socio-economic and environmental regulations.

According to Molnar (2003), regulatory barriers which dictate the scale at which CFOs can operate are also a hindrance to implementing forest certification in less developed countries. This is the case in Cameroon, where the maximum statutory limit of 5,000 ha for CFOs prevents them from being competitive and securing the scale and bargaining power that would enable them to gain access to the international markets available to certified industrial concessions. Small-scale producers therefore face intense competition from both low cost timber emanating from plantations and large-scale enterprises (Molnar 2003; Richards 2004; De Pourcq et al. 2009). In addition, it was revealed during an interview that certification of CFOs is completely absent in the Littoral Region because 'communities lack the required expertise in trade and markets forecast'. Five other authorities from community forest enterprises in the Southwest and East Regions of the country shared this viewpoint.

Finally, certified CFOs in developing countries usually encounter difficulties in finding markets for their products because demand for certified timber in local markets is generally low (Becker and Laaksonen-Craig 2006; Guéneau 2006). This is certainly the case in Cameroon. As one interviewee in the East Region of the country explained: 'locally, people who buy timber don't know about this certification ... and are not attracted to certified wood.' This situation is also noted in some export markets. China, for instance, is one of the largest importers of timber from Cameroon (Global Timber 2009), but has limited interest in certified timber products (Maynard and McDermott 2006). Securing international trading partners for certified wood products would therefore seem like a monumental task for CFOs in Cameroon.

### *Information Barriers*

From an informational point of view, many CFOs in Cameroon seem to lack sufficient knowledge of forest certification, specifically, and sustainability, more generally. Most CFOs in the country are geographically isolated and have poorly developed communications and information networks. During field visits to a series of CFOs in the East Region of the country, it was noted that many lack internet access and telephones (land-lines), thus making communication and information gathering about forest certification and related procedures extremely difficult, if not impossible. More importantly, with the government of Cameroon being only marginally concerned about environmental management and sustainable practices (Alemagi 2007), little has been done to promote forest certification in the country.

Standards of sustainable forest management are highly technical and tend to be written in languages (mostly in English, Spanish and French) which make them

difficult for the less literate members of forest communities to comprehend (Naussbaum et al. 2000). While English and French are the administrative languages in Cameroon, most people in many forest-dependent communities do not have a mastery of these official languages, and this may constitute a major barrier to understanding and adopting forest certification. An interviewee in the Southwest Region of the country provided a specific perspective on this situation:

I have never heard about forest certification ... What is it all about, because we cannot be adopting something without understanding it ...? If anyone who understands it [certification] can properly explain it to us, it will be wonderful ... I am sure it is written in French.

Where possibilities of certification have been identified in CFOs in Cameroon, an additional barrier faced is the lack of education on certification at the community level (Pa'ah 2010) due to the shortage of skilled and competent personnel on community forest certification within these communities. In that certification processes are already costly, staffing problems only pose an additional burden to forest operations with limited funds and resources and can, therefore, discourage many from adopting certification.

## Measures for a Path Forward

Certification can be an important tool for CFOs in developing economies for achieving sustainable forest management (Humphries and Kainer 2006). However, given current conditions in Cameroon, CFOs will find adoption difficult without external assistance. In general, individual operations are unable to effect fundamental change on their own, so there is a salient need for assistance and interventions from both government and non-government organizations.

### Potential Government Intervention Measures

If the Cameroonian government wishes to achieve sustainable forest management through the promotion of certification of CFOs, then it must play a leadership role in providing incentives for CFOs to adopt this forest management tool through policy changes. Many of the hurdles identified in this paper could be partly overcome with government support for the following strategies (Molnar 2004):

- tackle policy and regulatory barriers, with one possibility being to promote transparency and accountability in the management of community forest resources and their proceeds;
- engender political support by recognizing indigenous customary land rights within community forests;
- provide technical assistance to CFOs;
- promote public support for community forest certification by providing education and informational resources; and

- promote the exchange of experiences between communities and successfully certified CFOs in other countries.

There is a need for government to design financial assistance schemes that are easily accessible to CFOs with insufficient finances. These schemes could take the form of incentives, including subsidies (direct government funding) and tax-breaks (Opschoor et al. 1994), and would serve to encourage CFOs to consider the possibility of certification. This means of government support has promoted certification of CFOs in Latin America. For example, the government of Mexico provided incentives to CFOs for these purposes (Fonseca 2006). Cashore et al. (2006) noted institutional government support for CFOs in Bolivia, where government policy mandates certification as a prerequisite for renewing any forest exploitation permit.

It can also be argued that financial assistance from the government for certification is likely to be economically beneficial to CFOs in Cameroon over the long-term. In fact, 52% of companies<sup>4</sup> with certified environmental management systems in place (like ISO 14001) along the Atlantic coast of Cameroon report that implementation of these systems has resulted in financial benefits, largely as a result of improvements to industrial efficiency (Alemagi et al. 2005, 2006). Lending schemes designed by the government to help CFOs finance certification could, in theory, be beneficial to both parties over time; CFOs benefit from improved efficiency, while the government is better able to promote socio-economic and ecological performance within CFOs.

Certification of CFOs can be a difficult and expensive task for the government to undertake, with many communities needing substantial technical and financial assistance to reach certification standards, engage in the auditing process, and eventually find the right markets for their certified products. Considering the fact that certification has received strong support and promotion from many international bodies—including the World Wildlife Fund (WWF), the International Union for the Conservation of Nature, the United Nations Environment Program, and the World Bank (Cashore et al. 2006; Elliot 2000)—it makes sense for the government of Cameroon to provide institutional support by forging partnerships with these bodies, while also encouraging local NGO involvement.

### Community and Civil Society Efforts to Promote Certification

Although various agents can play central roles in promoting certification of community forests in Cameroon, progress towards this hinges upon initiatives formulated by the CFOs themselves, as well as civil society. To date, some effort has been made to promote community forest certification in Cameroon. As Irvine (1999) observed, projects on certification have been undertaken in Cameroon with a notable initiative being the creation of FSC regional and national working groups to develop national standards and coordinate initiatives regarding community forest certification. However, it is important to stress that certification can only be

<sup>4</sup> These companies include oil and gas companies, companies producing chemicals, food processing companies, and agro-industrial companies.

achieved if initiatives are developed that emphasize methods for CFOs to circumvent barriers identified in this paper. The following policy implications should, therefore, be considered by civil society actors that are engaged in interventions related to certification and CFOs that are seeking to adopt certification:

1. **Group certification:** This is the grouping of several CFOs into one organization for the purpose of forest certification. Given that economic barriers were found to restrict communities' ability to obtain certification, communities can adopt this strategy to increase scale and thus help reduce the high costs of community forest certification (Fischer et al. 2005).
2. **Subsidies:** These are financial instruments—similar to the government incentives described above—that could be used by international bodies (especially those involved in FLEGT Voluntary Partnership Agreement processes) and NGOs to assist CFOs in their pursuit of forest certification. For instance, financial subsidies in the form of funding from NGOs served to reduce the cost of certifying the Mayan Biosphere Reserve (a community-owned forested area) in Petén, Guatemala by 50% (Soza 2003; Fischer et al. 2005).
3. **Capacity building:** This includes all efforts aimed at developing human skills or societal infrastructure within a community (Van Crowder 1996). There is a documented need for NGOs (including community or producer associations) to provide guidance and training to CFOs as a means of assisting them in developing the requisite skills in sustainable forest management and forest certification (Markopoulos 2003; Molnar 2004).

## Concluding Comments

Since their inception, community forest operations in Cameroon have faced ecological degradation within their forests, as well as generally stagnant socio-economic performance. One potential means of improving this situation would be for community forests to adopt forest certification. This exploratory paper identified the potential benefits (social, economic, and environmental) of community forest certification in Cameroon. It further identified the major impediments to certification of CFOs (legislative and political hurdles, economic setbacks, and informational barriers), and the extent to which each of the identified barriers prevent uptake of certification among CFOs.

Government and civil society have important roles to play to overcome the barriers to forest certification identified in this study. Specifically, there is a broad need for these actors to provide assistance in obtaining and disseminating the relevant information about certification to CFOs, invest in capacity building, encourage group certification, and offer subsidies so that CFOs are better equipped to adopt certification.

The use of forest certification as a tool for promoting sustainable forest management will not address all of the issues facing CFOs in Cameroon. Certification may be too costly for many CFOs to implement and it may not provide the desired financial returns (Bass et al. 2001; Markopoulos 2003; Stewart et al.

2003; Molnar 2003; SNV et al. 2005; De Pourcq et al. 2009). Many CFOs in developing nations lack the scale required to access environmentally friendly markets (i.e. those that would purchase certified wood products) because consumers exist primarily in distant markets, including North America and Western Europe (Gullison 2003; De Pourcq et al. 2009). The requirements for international markets to absorb certified products are often very demanding, most requiring high quality products that are often beyond the reach of many CFOs (Molnar 2003; Richards 2004; De Pourcq et al. 2009). However, despite all these setbacks, certification is generally better able to promote sustainable management than prevailing forestry legislation for logging concessions in Cameroon (Cerutti et al. 2011). Thus, the same logic may hold true for CFOs, as well. As noted by UNECE (2007, p. 24), ‘certification remains an important means of verifying responsible behaviour, legality, and claims of sustainable practice’, and examples from around the world have shown that certification can, in fact, bring many additional benefits to CFOs. If communities can overcome the barriers reviewed in this paper, certification can become an important part of a strategy to promote sustainable forest management, enhancing community forest operations in Cameroon.

**Acknowledgments** This research was made possible with support from the Social Sciences and Humanities Research Council (SSHRC) of Canada and the Africa Forests Research Initiative on Conservation and Development (AFRICAD) in the Faculty of Forestry at the University of British Columbia. The authors would also like to express their gratitude to all those interviewees who spared their valuable time to share their knowledge and experiences about community forest operations in Cameroon.

## References

- Abèle P, Nguenang GM, Eboule Singa NA, Eyene Esomba A, Djeukam R, Cuny P (2004) Etat des lieux de la foresterie communautaire au Cameroun. Unpublished consultancy report. Available online at: <http://cameroun-foret.com/bibliotheque/9216>. Accessed on 11 Aug 2011
- Acharya BP (2007) Practice and implementation of forest certification in Nepal: a case study from some CFUGs in Dolakha District. Master of Forest Science Thesis, University of Natural Resources and Applied Life Sciences, Vienna
- Alemagi D (2007) The oil industry along the Atlantic coast: assessing impacts and possible solutions. *Resour Policy* 32(3):135–145
- Alemagi D (2010) A comparative assessment of community forests in Cameroon and British Columbia, Canada. *Land Use Policy* 27(3):928–936
- Alemagi D, Kozak RA (2010) Illegal logging in Cameroon: causes and the path forward. *For Policy Econ* 12(8):554–561
- Alemagi D, Oben PM, Ertel J (2005) A survey of environmental management system initiatives in industries along the Atlantic coast of Cameroon. *Corp Environ Strateg Int J Sustain Bus* 12(5–6):1–10
- Alemagi D, Oben PM, Ertel J (2006) Implementing environmental management systems in industries along the Atlantic coast of Cameroon: drivers, benefits and barriers. *Corp Soc Responsib Environ Manag* 13(4):221–232
- Amaral P, Neto MA (2005) Manejoflorestalcomunitario: processos e aprendizagem na Amazonia Brasileira e na América Latina. IEB and IMAZON, Belem
- Ameriei L (2005) Legal compliance in the forest sector: a case study of Cameroon. Final report, FAO, Rome
- Ammerberg J (2003) Do standardized environmental management systems lead to reduce environmental impacts? Doctoral thesis. Institute of Technology, Linköping University, Sweden
- Angu K (2007) Community-based forest enterprises in Cameroon: a case study of the Ngola-Achip Community forest in East Cameroon. Rights and Resources Initiative, Washington, DC

- Araujo MC (2008) Forest certification in Brazil: choices and impacts. A thesis submitted in conformity with the requirements for the degree of Master of Science in Forestry. Faculty of Forestry, University of Toronto
- Bass S, Thornber K, Markopoulos M, Roberts S, Grieg-gran M (2001) Certification's impacts on forests, stakeholders and supply chains. Forestry and Land Use Programme, International Institute for Environment and Development (IIED), London
- Becker SM, Laaksonen-Craig S (2006) Barriers to forest certification in developing countries. In: Lars L, Rosenquist B (eds) Proceedings of the biennial meeting of the Scandinavian society of forest economics. Scandinavian Forest Economics No. 41, Uppsala
- Bray D, Merino-Perez L, Barry D (2005) The community forests of Mexico: managing for sustainable landscapes. University of Texas Press, Austin
- Carrera F, Stoian D, Campos JJ, Morales J, Pinelo G (2006) Forest certification in Guatemala. In: Cashore R, Gale F, Meidinger E, Newsom D (eds) Confronting sustainability: forest certification in developing and transitioning countries. Yale School of Forestry and Environmental Studies Press, New Haven
- Cashore R, Gale F, Meidinger E, Newsom D (2006) Confronting sustainability: forest certification in developing and transitioning countries. Publication series report no. 8. Yale School of Forestry and Environmental Studies Press, New Haven
- Cerutti PO, Nasi R, Tacconi L (2008) Sustainable forest management in Cameroon needs more than approved management plans. *Ecol Soc* 13(2):36
- Cerutti PO, Tacconi L, Nasi R, Lescuyer G (2011) Legal versus certified timber: preliminary impacts of forest certification in Cameroon. *For Policy Econ* 13(3):184–190
- Creswell JW (1998) Qualitative inquiry and research design: choosing among five traditions. Sage Publications, Thousand Oaks
- De Pourcq K, Thomas E, Van Damme P (2009) Indigenous community-based forestry in the Bolivian Lowlands: some basic challenges for certification. *Int For Rev* 11(1):12–26
- Elliot C (2000) Forest certification: a policy perspective. Centre For International Forestry Research, Jakarta
- Elliot C, Donovan RZ (1996) Introduction chapter. In: Viana VM, Ervin RZ, Donovan RZ, Elliot C, Gholz H (eds) Certification of forest products: issues and perspectives. Island Press, Washington, DC
- Etoungou P (2003) Decentralization viewed from inside: the implementation of community forests in East Cameroon. Working paper, World Resource Institute, Washington, DC
- Fischer C, Aguila F, Jawahar P, Sedjo R (2005) Forest certification: towards common standards. Resources for the Future, Washington, DC
- Fonseca SA (2006) Forest certification in Mexico. In: Cashore R, Gale F, Meidinger E, Newsom D (eds) Confronting sustainability: forest certification in developing and transitioning countries. Yale School of Forestry and Environmental Studies Press, New Haven, p 626
- FSC (2009) Global FSC certificates: type and distribution. Forest Stewardship Council, Bonn
- FSC (2011) FSC principle and criteria. Forest Stewardship Council, Bonn, Germany. Available online at: <http://www.fsc.org/pc.html>. Accessed on 13 Jan 2011
- Gambetta CF, Stoian D, Campos JJ, Cancino JM, Pinelo G (2006) Forest certification in Guatemala. In: Cashore R, Gale F, Meidinger E, Newsom D (eds) Confronting sustainability: forest certification in developing and transitioning countries. Yale School of Forestry and Environmental Studies Press, New Haven
- Gauld R (2000) Maintaining centralized control in community-based forestry: policy construction in the Philippines. *Dev Chang* 31(1):229–254
- Gbetnkom D (2005) Deforestation in Cameroon: immediate causes and consequences. *Environ Dev Econ* 10(4):557–572
- Global Timber (2009) Cameroon—tropical timber exports. Global Timber. ORG.UK. Available online at: <http://www.globaltimber.org.uk/cameroon.htm>. Accessed on 13 Jan 2011
- Guéneau S (2006) La certification de la gestion forestière au Brésil: Portée et limites des nouvelles formes de gouvernance privées: 52e Congrès international des américanistes Sevilla, Spain
- Gullison R (2003) Does forest certification conserve biodiversity? *Oryx* 37(2):153–165
- Hayter R (2003) “The war in the woods”: Post-fordist restructuring, globalization, and the contested remapping of British Columbia's forest economy. *Ann Assoc Am Geogr* 93:706–729
- Hayter R, Barnes T, Bradshaw M (2003) Relocating resource peripheries to the core of economic geography's theorizing: rationale and agenda. *Area* 35(1):15–23



- Humphries SS, Kainer KA (2006) Local perceptions of forest certification for community-based enterprises. *For Ecol Manag* 235(1–3):30–43
- Irvine D (1999) Certification and community forestry: current trends, challenges, and potential. Background Paper for the World Bank/WWF Alliance, Workshop on Independent Certification, Washington, DC
- Kongape JA, Etoa-Akoa LPA (2011) La foresterie sociale au Cameroun: Leçons apprises et perspectives. Ministère des Forêts et de la Faune, Yaoundé, Cameroun
- Kvale S (1996) Interviews: an introduction to qualitative research interviewing. Sage Publications, Thousand Oaks
- Markopoulos M (2003) The role of certification in community-based forest enterprise. In: Meidinger E, Elliott C, Oesten G (eds) Social and political dimensions of forest certification. Remagen-Oberwinter, Germany
- Maynard B, McDermott C (2006) Forest certification in the Tropical Asia-Pacific. In: Cashore R, Gale F, Meidinger E, Newsom D (eds) Confronting sustainability: forest certification in developing and transitioning countries. Yale School of Forestry and Environmental Studies Press, New Haven
- Mbile P, Ndzomo-Abanda G (2006) The law, the weight on our lands: local perceptions and social hiccoughs in the exploitation of timber resources in Cobabo, East Cameroon. In: Proceedings of the seminar on the opportunities and constraints to successful agro forestry science and practice in the Djalandscape Cameroon. Yaoundé, Cameroon
- Mbile P, Ndzomo-Abanda G, Essomba H, Misouma A (2008) A forest policy context and case study analysis to support alternative tenure and enterprise options for trees and forest resources management in Cameroon. Rights and Resources Initiative, Washington, DC
- McCarthy J (2006) Neoliberalism and the politics of alternatives: community forestry in British Columbia and the United States. *Ann Assoc Am Geogr* 96(1):84–104
- MMA (Ministry of the Environment) and Government of Acre (1999) Alternativas para o desenvolvimento de atividades sustentáveis. Agenda Positiva do Estado do Acre. Available online at: <http://www.amazonia.org>. Accessed on 20 May 2011
- Molnar A (2003) Forest certification and communities: looking forward to the next decade. Forest Trends, Washington, DC
- Molnar A (2004) Forest certification and communities. *Int For Rev* 6(2):173–180
- Mveng E (1984) Histoire du Cameroun. Centre de Production pour L'enseignement et la Recherche, Yaoundé, Cameroon
- Naussbaum R, Garforth M, Scrase H, Wenban-Smith H (2000) An analysis of current FSC accreditation, certification, and standard setting procedures: identifying elements which create constraint for small forest owners. International Institute for Environment and Development, London
- Ndjebet C (2008) Community forestry development as means for poverty alleviation and sustainable management of natural resources in the coastal region of Cameroon. Cameroon Ecology, Edea, Cameroon
- Ndoye O, Kaimowitz D (2000) Macro-economics, markets and the humid forest of Cameroon, 1967–1997. *J Mod Afr Stud* 38(2):225–253
- Nguemdjom A (2006) Dilemmas in tackling deforestation in Cameroon. One world Cameroon guide. Article available online at: <http://uk.oneworld.net/article/view/142737/1/>. Accessed on 18 Jan 2011
- Nguiffo S, Kenfack ET, Mballa N (2009) The influence of historical and contemporary land laws on indigenous peoples' land rights in Cameroon. Rights and Resources Initiative, Washington, DC
- Nkoulou J, Fomete T (2009) Etude de faisabilité économique de la certification FSC de groupe des forêts communautaires du Cameroun. Rainbow Environment Consult, Cameroun
- Nussbaum R, Simula M (2005) The forest certification handbook. Earthscan, London
- Oyono PR (2005) Profiling local-level outcomes of environmental decentralizations: the case of Cameroon's forests in the Congo Basin. *J Environ Dev* 14(3):317–337
- Opschoor JP, De Savorin-Lohman AF, Vos HB (1994) Environmental management: the role of economic instruments. OECD, Paris
- Oyono PR (2004) The social and organizational roots of ecological uncertainties in Cameroon's forest management decentralization model. *Eur J Dev Res* 16(1):174–191
- Pa'ah PA (2010) Small-scale community land ownership in Cameroon—an opportunity for certification. The Trinational Agro Forestry Cooperative (CAFT), Lomé, East Region
- Pinchot Institution For Conservation (2006) Certification: definition and background. Pinchot Institution for Conservation, Washington, DC



- Quevedo L (2006) Forest certification in Bolivia. In: Cashore R, Gale F, Meidinger E, Newsom D (eds) *Confronting sustainability: forest certification in developing and transitioning countries*. Yale School of Forestry and Environmental Studies Press, New Haven, p 626
- Richards M (2004) Certification in complex socio-political settings: looking forward to the next decade. *Forest Trends*, Washington, DC, p 41
- SNV, WWF, CFV (2005) Stichtingvoor Nederlandse Vrijwilligers, World Wide Fund for Nature and Certificacion Forestal Voluntaria. Revisandolaexperiencia de certificacion de manejoforestal comunitario en Americalatina: propuestas para la proxima asamblea 2005 del FSC 21 al 22 de Octubre de 2004. In: Van Dam (ed), Santa Cruz de la Sierra, Bolivia
- Soza C (2003) The process of forest certification in the Mayan Biosphere Reserve in Petén, Guatemala. In: MOLNAR A (ed) *Forest certification and communities: looking forward to the next decade*. Forest Trend, Washington, DC
- Stewart J, Highman S, Brown L, Robinson D, Peachey V (2003) Increasing the contribution of forest certification to sustainable rural livelihoods. Paper presented at the international conference on rural livelihoods, forests and biodiversity, Bonn
- Thornber K, Markopoulos M (2000) Certification: its impacts and prospects for community forests, stakeholders, and markets. International Institute for Environment and Development (IIED), London
- Thornber K, Plouvier S, Bass S (1999) Certification: barriers to benefits. A discussion of equity implications. A Forest Certification Advisory Group Briefing paper. European Forest Institute, Joensuu
- Transparency International (2008) The 2008 transparency international corruption perceptions index. Transparency International, Berlin
- UNECE (2007) Forest products annual market review 2006–2007. Report No. 22, United Nations New York and Geneva
- Van Crowder L (1996) Human resource and institutional capacity building through agricultural extension. The Food and Agricultural Organization, Rome. Available online at: <http://www.fao.org/sd/EXdirect/EXan0015.htm>. Accessed on 18 Jan 2011
- von Schkopp E (1913) Dwarf peoples in Cameroon. *Globus* 83:18–21
- Wilkie DS (1988) Hunters and farmers of the African forest. In: Denslow JS, Padoch C (eds) *People of the tropical rainforest*. University of California Press, Berkeley
- WWF (2002) Forest certification. Position paper. Zurich, Switzerland. Available online at [wwf.org](http://www.wwf.org). Accessed 14 May 2010